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Citation for published version:

Sheail, P 2018, 'The digital university and the shifting time–space of the campus', *Learning, Media and Technology*, vol. 43, no. 1, pp. 56-69. <https://doi.org/10.1080/17439884.2017.1387139>

Digital Object Identifier (DOI):

[10.1080/17439884.2017.1387139](https://doi.org/10.1080/17439884.2017.1387139)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Learning, Media and Technology

Publisher Rights Statement:

This is an Accepted Manuscript of an article published by Taylor & Francis in Learning, Media and Technology on 12 Oct 2017, available online: <http://www.tandfonline.com/doi/full/10.1080/17439884.2017.1387139>.

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Sheail, P 2017, 'The digital university and the shifting time–space of the campus' Learning, Media and Technology, pp. 1-14. DOI: 10.1080/17439884.2017.1387139

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[10.1080/17439884.2017.1387139](https://doi.org/10.1080/17439884.2017.1387139)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Published In:

Learning, Media and Technology

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The digital university and the shifting time-space of the campus

Abstract

This paper explores the concept of translocality, of being ‘simultaneously situated’ in more than one place, in the context of ‘distance’ education in the digital university. The author works with the concept of critical time to propose an additional term, *transtemporality*, to also recognise the multiple times and temporalities engaged and interwoven in digitally connected spaces of work and study. The paper draws on interview material from an institutional case study of expansion in digital education, paying particular attention to student locations in time and space, arguing that recognising the shifting time-space of the campus is essential to supporting and teaching growing numbers of distance and part-time students. The author proposes that, rather than digital connections being viewed as a form of ‘reaching out’ from the university campus to the wider world, the digital university might be considered, in its translocal and transtemporal form, as an *opening up* of the idea of the university; embodied and imagined through strong connections across multiple locations, times and temporalities.

Keywords digital university, distance education, translocal, space, time

1. Introduction

In this paper I work with the concept of the translocal, drawn from research in geography and studies of migration, alongside work on critical time, to support an exploration of the digital university as an organisational form which consists of extensive translocal (across/between locales) and transtemporal (across/between times) connections. This is not to suggest that universities have ever been static, immobile, or single-sited, but rather to support a more complex understanding of the implications of strategic digital expansion into online distance education, particularly for universities which have long traditions of campus-based teaching and learning. There are particular implications here, for example, for the provision of student support services at a distance, requiring an understanding of the digital student experience, in order to appreciate and accommodate an increasing diversity of student circumstances and contexts. This requires an approach which makes online distance students more visible within higher education institutions, while opening up possibilities for imagining the university beyond its traditional (actual or imagined) spatial and temporal boundaries.

The paper draws on empirical research into the recent expansion of online distance education in a UK University, anonymised here as the University of *CityName*, which has a history, spanning several centuries, of city campus-based teaching and learning activities. Three detailed examples are drawn from accounts of student experiences, in order to engage with ideas of the translocal and transtemporal across particular places and times, and to provide an in-depth exploration of the implications of the

student experience for practice. Here I argue that this particularity is significant to an institution like *CityName* which, in order to take account of students studying beyond the traditional campus, must also come to understand itself as also being situated *in* (for example) particular locations within Bangladesh, Nigeria, Rwanda, Singapore, and so on. In contrast to the popular rhetoric of ‘anytime, anywhere’ in mobile technology discourse, these students are studying in particular places at particular times. Understanding this diversity of context, the associated challenges, and potential inequalities, is a responsibility of the contemporary digital university.

Recognising the broad sweep of the ‘digital’ term in higher education, Jones (2013) identifies the digital university as, ‘a concept in need of definition’ (162), a term used to identify change in relation to digital technologies across all areas of higher education activity. In this paper, rather than considering the digital in all areas of university work, I use the term particularly to think about digital connections and practices in areas of work directly relating to developments in online teaching and learning. In doing so, I aim to develop thinking about the form of the digital university, both theoretically and in relation to practice.

In writing about online distance education, I draw particular attention to its spatial terms. Going back to the significant discussion of terms authored by Keegan (1980), distance education continues to suggest distance *from* or distance *between*, ultimately positioning the student in relation to a central academic institution, its campus, and its teachers. A core argument of this paper is that the university should be seen less as one which ‘reaches out’ across distances, and more as one which ‘opens up’, in the sense that academic institutions should be more clearly recognised as organisations which are distributed across multiple locations in time and space. *Online distance* education, as it is commonly referred to, is an education which is semantically ‘twice removed’ from the physical location of the built campus.

2. Space and time in digital education

There have been several approaches in the higher education literature to furthering the discussion of space and time in relation to digital education. Fenwick, Edwards and Sawchuck (2012) review a range of theories of ‘spatiality and temporality’ in education research (130), including the role of technology spaces (156). Here, the authors particularly warn against ‘the binary of enclosure-openness’ in the digital context, suggesting that, while digital spaces may draw attention to learning which goes beyond the boundaries of the formal institution, it does not follow that these spaces are therefore also ‘open and egalitarian’ (157). Also focusing on issues of difference and inequality in online study, Rye and Støkken (2012) discuss the significance of the local context of a distance student as part of the education space, highlighting the way in which the resources available to students ‘regarding the time and space for performing and developing their student role’, are unevenly distributed (202).

At the institutional level, working with spatial theory and drawing on empirical work, Bayne, Gallagher and Lamb (2013) consider, after Mol and Law (1994), the ‘topological multiplicity’ (581) of the university viewed through the engagement of distance students. Bayne and Ross (2013) draw on Foucault’s (1986) concept of heterotopia, as a way of thinking about the form of the open web as an education

space, and Ross, Gallagher and Macleod (2013) consider the multiple ‘arrivals and departures’ involved for part-time students studying online, where, ‘comings and goings indicate a fluid and temporary assemblage of engagement’, as opposed to the perceived stability of ‘presence’ or ‘distance’ (abstract 51).

My work here is sympathetic to the work outlined above, but aims to go further in developing work on *time* in education alongside that of space. In doing so it calls for an alternate conceptual view of the university, in which these multiply layered and connected spaces *and times* are not only surfaced, but are acknowledged and considered as equivalent in relation to the institution, rather than continuing to be described in terms of their relation to the dominant time-space of the physical campus.

As online ‘distance’ education often involves participants in a variety of locations, communicating in digital environments, many locales may be engaged across the duration of a course, and a course may have multiple durations. Implicit in Ross, Gallagher and Macleod’s (2013) work, for example, is that this is a temporal as well as a spatial matter. While I do not suggest that those participating in digital education have the experience (necessarily) of migration, or physically moving between geographically distant places, I do propose that multiple locales - physical and digital, spatial and temporal - form a complex ‘location’ for the digital university. It is ‘simultaneously situated’, but also moving, physically, materially and imaginatively. As Bayne, Gallagher and Lamb (2013) observe, digital education is, ‘a mode in which institutional formation and personal identity, location and diaspora, mobility and stasis are continually and creatively re-thought, re-formed and re-shaped’ (571). This paper proposes translocality and transtemporality considered together as one way of thinking about such formations and re-formations, emphasising contextual differences and the temporal dimension.

Where the literature conceptualising space and mobility has supported valuable explorations of digital education, on which this paper builds, the concept of time in relation to digital and distance education, beyond the concept of time-space compression (for example, Fenwick, Edwards and Sawchuck 2012; Land 2011), has received much less attention in the education literature. As Barker (2012) suggests in his arts-based theoretical work on ‘time and the digital’, a continued emphasis on the spatial means that theoretical work on the digital production of ‘new temporalities’ is lacking (2).

This is not to suggest that time is absent from, or insignificant to, spatial theory. As Edwards (2014) points out, in his work on spatial theory in relation to networked learning, it is not the case that an earlier theoretical emphasis on time has been entirely replaced by one of space. However, as I outline below, recent work on critical time surfaces temporal experience and temporal interdependence, rather than focusing on time as a historical framework, by building on the work of critical geographers such as Massey (1993, 2005) to focus on the power relations of lived time (Sharma 2013).

There are, however, few examples of recent work in digital and distance education which place such an emphasis on a temporal framework. One notable exception in earlier work focusing on time in distance education is Raddon (2006, 2007) who, although focusing on a more traditional paper-based form of distance communication

rather than on digital practices, nevertheless notes that negative attitudes towards distance education are based upon, 'hierarchical conceptions of time, space, presence and absence' (158), contrasting this with the positive experiences of distance learners who see 'absence' from the spatial and temporal boundaries of the university as 'a major opportunity' (158). Other more recent temporal exceptions include a special issue of *E-Learning and Digital Media* (Barberà and Clara 2014), focused on 'the temporal dimensions of e-learning'; Barberà *et al* (2014), who have undertaken empirical work to consider aspects of 'temporal flexibility' in online learning in relation to the higher education institution, and Leeds (2014) who has written about the 'temporal experiences' of distance students, identifying 'temporal culture shock' among those undertaking their first online course.

Despite these time-based exceptions, there remains a gap in the literature, particularly in empirical work, in studies of time and temporality in digital education, with the effect of continuing to privilege distance and space over time in the experiences of students and staff engaged in teaching and learning online. In order to begin to address this here, I briefly introduce the work of Sharma (2013) on 'critical time', as a way of thinking about time at a number of levels, including at the institutional level, which provides an alternative to the focus on space-time compression in the education literature, where fast and slow time are often held in opposition (Levy 2007).

2.1 Critical time

Writing from the field of media and cultural studies, Sharma (2013) observes that critical approaches to time have a tendency to focus on 'the problem of contemporary speed up' (313). She counters dominant 'speed-theory' with the critique that the notion of speeding-up does not allow for a full exploration of 'temporal difference' (313). Sharma's central assertion here is that,

'the politics of *uneven time* still needs to be dealt with. Recognition of the interdependency of differential lived time tends to be ignored in almost any discussion about time, temporality, speed-up, time-management, work-life balance, tempo, and *life getting faster* in general.' (314)

Here Sharma points not simply to the multiplicity of lived time, but to the relationship *between* times, and how one person's experience of, and response to, temporality has the potential to affect another's (314). In the current discussion, for example, the time of the university calendar and the local timezone of the institution is often dominant in the scheduling and temporal design of online courses. A synchronous online course in UK daytime is the middle of the night for students elsewhere; a summer break between semesters in the UK, is not necessarily the holiday season elsewhere. While these differences may seem obvious, they can have significant implications for how a student fits studying into their working and family life, and are indicative of the temporal dominance of institutions which are temporally organised around the life of the built campus.

Sharma's (2013) critical temporal approach is lacking in the digital education literature, and from the higher education literature in general. Her work on 'critical time' offers a temporal critique with the aim of surfacing inequalities and unevenness in time and temporal relations. This, I suggest, offers a welcome interruption to any

perceived digital smoothness of a common unified ‘universal’ experience of time. I introduce Sharma’s work here, albeit briefly, in order to suggest that her critical approach to time offers a way of drawing out the potentially invisible temporal practices of an *online distance* education which is described in spatial terms. This is an approach which shifts the focus from distance and space to one which is balanced with time and temporality.

3. Beyond the transnational: thinking translocally

While there is a substantial literature on transnational higher education, extending to recent examples of the use of a transnational framework in digital education research (see the special issue of *Learning, Media and Technology* 39(4), Leander and de Haan 2014), it has mainly been applied to studies concerning learners who have been directly affected by experiences of migration. One recent exception can be found in the work of Omerbašić (2015) who, while also considering the experiences of young people who have been ‘resettled’, draws on a translocal framework to consider the ‘digital production of translocality’ (473). Omerbašić explores translocality in her work on literacy practices as, ‘a way to understand the complexities of spatial belonging and identities in relation to lived experiences as well as imaginations across multiple spaces’ (473). In the current paper, however, while recognising the relevance of recent work in studies on migration and the digital in education, I want to move away from a focus on physical migration in the experience of the student and to focus more closely on ideas of the ‘translocal’ as a common state of being, or feeling, connected to other places - whether within or beyond national borders - which extends to the level of institution in a formal higher education setting. My suggestion here is that this way of thinking about being connected is not only relevant to migratory experience and informal education, but is also relevant to everyday experiences of formal educational institutions where students and staff are connected in multiple ways across space and time, including ways which are not necessarily dependent on physical movement. Translocal and transtemporal connections and experiences, I propose, are an integral part of the form of the contemporary university, including the connections and experiences of those who inhabit the physical campus. As Hall (2012) suggests in her urban ethnography, exploring and mapping the connectedness of the city street, ‘There is no ‘local’, rather there is a layering and palimpsest of a multitude of ‘locals’” (130). Building on this idea, I suggest that digital education has the capacity to bring these locals together in new ways, highlighting and juxtaposing what Massey (2005) calls ‘contemporaneous differences’.

The concept of the translocal has been developed, particularly by geographers, as a way of thinking about the effects of human migration, leading to experiences of ‘simultaneous situatedness across different locales’ (Brickell and Datta 2011, 4). Greiner and Sakdapolrak (2013), in their review of the concept of translocality, describe an approach in which, ‘notions of fluidity and discontinuity associated with mobilities, movements and flows’, are balanced with with ‘notions of fixity, groundedness and situatedness in particular settings on the other.’ (376)

The translocal is a concept then which directs attention to strong local to local connections to more than one place, while taking the constraints and opportunities of both mobility *and* fixed locations into account. It would certainly be feasible to undertake a translocal study of a university campus, or perhaps a single campus street

or building (see Hall and Datta (2010) for their work on the translocal street), in order to think about the connections between the institution, its members, its 'local' geography, multiple languages through which its members communicate, and other more geographically distant places, whether lived-in, visited, studied or imagined. This kind of mapping, alongside those more formal collaborations and connections between institutions and nations, would represent a complex picture of the location(s) of the university. However, my application of translocality in this paper is to use it as a generative way of thinking particularly about the *digital* university and the spatial and temporal implications of online 'distance' education. To this end, I have chosen to think about the times and spaces which are connected and layered, when a number of students and staff in different locations are engaged in online courses. Taking into account the locales, times and temporalities which are connected in the digital university, I consider the implications for, and responsibilities of institutions which need to pay attention to the emerging digital student experience.

I introduce the term *transtemporal* in this paper, in conjunction with Sharma's work on critical time (2013), outlined above, to emphasise the coexistence of different 'times' when considering translocality and the university, particularly in a digital context. These times include not only the practical time differences in making translocal connections, across time zones, but also the experiential times of individual accounts, as well as the multiple political and cultural times, the 'times we live in', which might be significant to the practices of a digital education which aims to engage students and staff in multiple locations, while bringing them together in digital environments. Such transtemporal negotiations are explored in the interview material below.

It is my intention here, as indicated above, to explore the idea that, rather than digital connections being viewed as a form of 'reaching out' from the university campus to the wider world, perhaps we might think of the digital university, in its translocal and transtemporal form, as an *opening up* of the idea of the university, as embodied and imagined through strong connections across multiple locales, multiple times and temporalities. In the words of Hawawini's (2011) critical review of 'internationalization' in higher education, this is a university which is understood in a way which heightens its potential, '...to learn from the world rather than teach the world what the institution knows' (Hawawini 2011, abstract). If the juxtaposition of times and places brought into co-presence in the context of digital education are ignored, this is not only to smooth over potential inequalities, but also to overlook educational opportunities.

4. Methodology

This paper draws on a research project which took a narrative ethnographic approach (Gubrium and Holstein 2008) to exploring organisational change in a UK university, anonymised here as the University of *CityName*, during a period of expansion in its provision of online distance education for taught postgraduate students. Research questions explored how a strategic shift to increase the provision of online distance education in a traditional, research-intensive, campus-focused university affected the temporal and spatial practices of the institution. I was particularly interested in how online distance education presented challenges and opportunities for the campus-

focused university, and how these were being met by staff and students administering, designing, teaching and studying on new programmes undertaken fully online.

A total of twenty-nine interviews were undertaken over a period of two years with staff and students engaged with new or expanded distance education programmes and courses. Interview scheduling began with the most senior level staff involved, who formed a project leadership group, and moved on to interviews with programme directors and support staff in receipt of project funding to establish new courses. The majority of these early participants were interviewed again the following year to gain reflections and observations on project developments, including any challenges encountered. A final set of interviews was undertaken, towards the end of the research period, with new 'distance' students to gain their accounts of studying on new programmes and courses with the University of *CityName*. The overall aim was to follow the strategic initiative over time, from the institutional strategy narrative through the accounts of academic managers, to the accounts of academic staff developing new online courses, to the experiences of students studying those new courses. Interview material was analysed with a focus on the times and places/spaces referenced by interviewees and authors: the when(s) and where(s) of the university.

All university staff participants were interviewed in-person, on-campus. The seven students interviewed were based at varying physical distances from the main university campus. Three of the students were based in the UK, with others located in Bangladesh, Nigeria, Rwanda, and Singapore. Each student was enrolled on one of three online Masters programmes, in the humanities, social sciences, and medicine respectively, from which volunteer participants were sought. The overall student group was necessarily small as the courses undertaken were new, with modest levels of initial recruitment. Each of the programmes had received funding from the University's digital expansion project fund. Interviews with students took place either by telephone, by 'synchronous' online text chat, or by email, depending on the preference of the student, the technologies familiar to their course of study, and on what was possible in terms of the most accessible and reliable technology for the interviewee at the time of the interview, with attention being paid to the time and space of the interview itself (James and Busher 2012).

The different modes of communication with participants necessarily produced different temporal structures in the interview material, with synchronous immediacy juxtaposed with accounts of events over time. One participant who was slow to respond in an email exchange, for example, reported his involvement in a traffic accident during the lapse in communication. Interviews over a longer time frame allowed for reflection on the ongoing conversation on the part of participants, while synchronous conversations appeared to contain more in-depth contextual detail.

All interview transcripts were anonymized, and I have avoided referring here to any additional information about participants which might make them identifiable. Of particular relevance to this paper is that, although I have referred to the countries in which students were resident, I have not named particular towns or cities, or specified the organisations with which they were employed. This should not be seen to detract from the importance placed in this paper on the local context of the student, but rather highlights the ethical issues raised when recording the detailed contexts of individual participants. As noted above, the university which is the focus of the research, a

Russell Group institution with a long history of campus-based education, has also been anonymized, appearing here as the University of *CityName*. Its pseudonym has been chosen to emphasise the significance of place to the history of the institution, and a naming practice which is common to a substantial number of UK universities. The specific titles and topics of courses at *CityName*, beyond their broad disciplinary context, have been withheld, also to give anonymity to participants, given the relatively small number of similar online postgraduate courses available in the UK at the time interviews were undertaken.

5. Locating students in time and space

This paper draws particularly on interviews relating to the student participants in the online courses and programmes selected, in order to consider the times and places beyond the university campus which become significant, yet often remain hidden, in the context of an online course. To give context to the interview extracts explored below, the seven student interviews undertaken in this research project are summarised in the following table:

<i>Student Name (anonymised)</i>	<i>Country Location (physical)</i>	<i>Timezone (UTC = universal coordinated time)</i>	<i>Interview location (digital)</i>	<i>Interview tempo</i>	<i>Interview duration (approximate)</i>
Jay	Bangladesh	UTC +6	Email	Asynchronous	Several weeks
Ella	Nigeria	UTC +1	Skype instant messaging	Synchronous	One hour
Theo	Rwanda	UTC +2	Email	Asynchronous	Several weeks
Chris	Singapore	UTC +8	Email	Asynchronous	Number of weeks
Caitlin	UK	UTC +0	Blackboard Collaborate instant messaging	Synchronous	One hour
Megan	UK	UTC +0	Skype instant messaging	Synchronous	One hour
Robin	UK	UTC +0	Telephone	Synchronous	One hour

Table 1: *Student interviews by location, timezone and mode/duration of interview*

The timing of interviews, even those undertaken by email, was affected by negotiating around participants' work and study commitments and, to a lesser extent, by time zones. All of the students I interviewed were also employed, and some also referred to family commitments. Some related their course directly to their professional work, while others either made no direct connections between work and study, or explained that these two aspects of their lives were not directly related, particularly where resources for study, such as time, facilities and funding, were not provided by employers.

Staff were asked about the origins of the wider online distance project, the motivation for their involvement with it, and to give details of the related activities they had been involved with to date as well as future plans. Students were asked broad questions about their programme of study: why they had chosen it; about their interactions with

course materials, staff and other students; when and where they studied, and about any particular challenges or highlights of their studies so far.

Transcripts were coded to include temporal and spatial references in the interview material, building on what Clandinin and Connelly (2000) have developed as a 'three dimensional narrative inquiry space' for narrative research (50). Key terms in this space are:

'personal and social (interaction); past, present, and future (continuity); combined with the notion of place (situation). This set of terms creates a metaphorical three dimensional narrative inquiry space, with temporality along one dimension, the personal and the social along a second dimension, and place along a third.' (Clandinin and Connelly 2000, 50)

To the broad category of 'interaction', I also added the term 'material'. This was to enable me to record references in interviews to interactions with physical and digital objects (sometimes also arguably doubling as spaces/places), such as notebooks, laptops, and online discussion boards.

This approach to the research material enabled me to surface and work with a number of time-spaces, from the research time-space (the time-space of the interview, for example), to the study time-space of the student, to the campus time-space of the institution. In this paper, I draw out some of the detail which emerged in my analysis of student related data; the temporal and spatial experiences and locations of students at varying physical distances from the *CityName* campus. In this analysis it is not my intention to make generalizations across the research data, but to highlight individual experiences and institutional processes. Here I was looking for in-depth, rich and detailed accounts of contexts and connections.

In the following sections, I work with excerpts from my research interviews with students and staff, focusing primarily, for the purposes of this paper, on student 'locations' in time and space. I develop 'thick' descriptions of three locations drawn from my research material, giving careful consideration to the spatial and temporal positioning of 'distance' students, beyond the campus-focused institution.

The three cases selected for this paper highlight three different temporal and spatial experiences impacting on the practice of studying. Of the following excerpts, the first example is from a telephone interview with a student based in the UK, enrolled on a programme in the humanities; the second is from an on-campus interview with a member of staff who refers to a student based in Egypt, also enrolled on a humanities programme, studying on one of the courses the staff member supports, and the third is from a Skype text interview with a student based in Nigeria studying on a medical programme. I have indicated the 'location' of each interview and, where a digital environment provides textual time-stamps in a conversation, these have been preserved as part of a visible temporality, and evidence of the intervention of the relevant software in the conversation of the text. My intention here is neither to generalise about the nationally bounded locations of these students, nor to generalise across the interview data, but rather to focus on, juxtapose, and highlight the differences in individual contexts which may remain hidden, while being drawn together, in the practices of an online course. The cases below refer to students from

diverse country locations for comparison, although each student case in the overall study surfaces a unique combination of times and places of significance in relation to their studies with *CityName*. The section below is limited to three student cases to allow for an in-depth discussion of each case. I then go on to consider the analysis in relation to implications for practice.

6. Locating the digital university

6.1 The car park

Before recording begins, the location of my interview with Robin moves from the online collaboration environment, Blackboard Collaborate, to email, to a telephone connection. Robin has a preference for voice over text for our conversation, but has a problem in accessing Collaborate, which I'm using as a recording space, at the point we have agreed to meet. We catch up by email and agree to talk on the phone instead. While Robin and I are each in our own homes, we move between three conversation spaces, although it doesn't take long for us to negotiate the final 'location' of our call. In fact, I don't know where 'home' is exactly for Robin, but I do know from our interview that it is around twenty miles from the city in which he works. Robin tells me he has a history of part-time 'distance' study (prior to enrolling on a humanities course with the University of *CityName*) and I ask him to tell me more about the times and places that work well for him to study in. Two points in our conversation are highlighted below.

ROBIN: 'I started off...I'd drive to work an hour early and sit in the in the [workplace] car park and do forty minutes there, and then I'll do forty minutes at lunchtime reading, and then maybe an hour at night, an hour and a bit at night, just as and when.'

Although the words 'started off', suggest a temporary routine (perhaps negotiating rush-hour, although I didn't confirm this with Robin), a car park might seem an unlikely place to study, although it does represent a relatively private space in a time demarcated as 'before work'. Robin tells me that his workplace is approximately '200 yards' from the nearest university campus, but that he couldn't physically attend a programme of study there because he works full-time. So Robin sits in a car park, 200 yards from his nearest 'physical' university, and studies with the University of *CityName*. Robin is temporally distant from the 'local' university and spatially distant from the University of *CityName*. He sits between two imagined universities (he tells me he has never physically 'attended' an on-campus course) and, as he studies, the student work of the University of *CityName* is performed 'before work', in a car, in a car park, almost three hundred miles from its physical campus. There isn't, of course, necessarily anything 'digital' about this time-space; Robin tells me that he is 'old school' and uses paper and a clipboard and writes by hand, as well as connecting with his course online via his laptop for tutorials and discussions, and I don't ask if Robin is using his phone or a laptop in the car. However, it is the digital programme of study which connects Robin with *CityName*, and with the locations of other students on his course. He is strongly, imaginatively, connected to other people and other places, particularly to those staff and students he communicates with online on a regular basis. He tells me, 'the actual online...the interaction and commenting on

other people's work, I've not come across that before...and that is probably the most useful thing, most definitely' (Robin).

Later in our conversation, Robin tells me more about how he schedules his study activities,

'the biggest thing is...working out your timing, that's the biggest thing...you've got to work in half-hours, a half-hour here...and then your big sessions. You've got to grab time where you can.' (Robin)

Robin's calculation of valuable study time is broken down into units of half an hour to an hour, although he also refers to 'big sessions', indicating to me that it is either difficult to find longer stretches of time, 'you've got to grab time', or that Robin is particularly focused in the use of all the spare time that he has available for study. Robin is a student who reports working in short bursts of time, including several study 'locations' in his interview. There is a small area mobility to his account, which is more evident than in the interview conversations I have with other students. I interpret this, not as 'anytime, anywhere' study, but as a series of opportunistic engagements, where time and space have to be sought out in cars, lunchtimes and half hours. Robin's 'half-hours' are, of course, in stark contrast with the long-term 'future' thinking and planning of much of the discourse around the expansion of online learning. Even the University of *CityName* plans its digital expansion of postgraduate studies over a number of years. The times and spaces of Robin's interview emphasise that studying, wherever the 'online' connection is made, takes time, and that time has to be found in conjunction with an appropriate space. While it is nothing new to point out that studying part-time while working full-time can be difficult to schedule, surfacing where and when studying takes place can, nevertheless, be revealing of individual practices at the micro-level. In designing an online programme of study, many assumptions might be made of the student participants, but the difficulties of negotiating time and space in the absence of, for example, a university library as a study space (rather than a collection of resources), may not be accounted for. Robin cannot access the nearest university study space, even though it seems likely that it is a short walk from his car park study space. Robin's car in the early morning becomes an extension of University time-space. Through Robin's studying practices, the University becomes present in a car park hundreds of miles from its built campus.

6.2 The curfew

Jo is a member of staff at the University of *CityName*, who has a particular role in providing technical support for digital learning environments. We meet in her office on the campus and talk about a particular online programme in the humanities that she has been working with. Jo talks to me about the challenges of scheduling regular 'synchronous' sessions (in Blackboard Collaborate) for tutors and students who are based in different time zones, and who have different personal and professional commitments. She stresses that the 'timeframes that we have now for this cohort', would not necessarily work with a different configuration of simultaneously located students, and goes on to point out that once a workable 'timeframe' has been established, the local temporal and spatial circumstances of individual students will

often be subject to change. In telling me this, she gives an example from a course she is supporting,

‘one of the students is in Egypt, and because of all the political unrest that’s been going on, there’s been power out, they shut the power off for everybody at ten o’clock...so he doesn’t have internet, he can’t always stay at [his workplace] and so lots of things are disrupted, or just have to be within curfew, before curfew hours, so he’s requested if they [student tutorial group] could meet a bit earlier.’ (Jo)

This example is important, because it isn’t just about finding a convenient time in relation to a time zone, but relates the correspondence of the student time-space to a national, geopolitical time-space (a state of emergency), and back to the time-space of the University of *CityName*, some four thousand physical miles away. Jo tells me that the student group will discuss whether they can find a better time to meet online with this student, working around the hours of curfew. If there is a good reason for re-scheduling a tutorial, a continued curfew in a state of national emergency must surely be one of the most compelling. When I return to the interview transcript later, the curfew and the state of emergency are only just being lifted, having remained in place for three months, from mid-August to mid-November 2013 (BBC 2013). Returning to it again after a few months have passed, I look at the BBC news website and navigate the ‘Egypt in Crisis’ pages with their offering of a ‘multimedia timeline’, ‘interactive map’ and ‘clashes close up’. At the time of editing this article, the headline had changed to ‘Egypt under Sisi’ (BBC 2016). I wonder where the student Jo referred to is, and if he was able to continue studying with the University of *CityName*. He is two hours apart, in time zone terms, from Robin in the UK, but his geopolitical context is distinctly different. The University is present in a UK carpark in the early morning; it is also co-present in an Egyptian city in crisis before curfew. There are issues here of access to space and time, but also of access to infrastructure.

6.3 The generator

Ella works full-time in a Nigerian university and is taking an online Masters degree in a health-related subject at the University of *CityName*. My interview with Ella took place using the instant messaging service provided by Skype. Prompted by my initial message, Ella and I share current location information and our local conditions. From my home in the UK, I tell her that I can see snow from my window; from her office in Nigeria, Ella tells me that the weather is sunny and warm, but that she is in anticipation of the seasonal rain soon to come. It is 12 noon in Nigeria and 11am in the UK. Although, in terms of physical distance, Ella and I are around 3,500 miles from each other, in time zone terms we are only an hour apart. Through the instant messaging interface we, or our typed words, appear together in the same digital time-space, although I have no idea what Ella’s view of the text is like in comparison to mine. Despite our connection, there are disruptions to our conversation, ‘So sorry, the internet is fluctuating’ (Ella).

Ella tells me that studying with others online gives her a sense of being in a ‘global class right in my office/living room’ (Ella). When I ask Ella what the best place and time to study are for her, she tells me that she studies ‘late evening’ at work, or ‘mid-night’ at home. Ella’s class is mobile, in the sense that it travels with her between two

different, yet connected, local spaces; her living room and her office. The traditional educational space, 'globally' populated, is transferred into the late evening workspace or the mid-night domestic time-space. Spatially imagined, the global class enters the home, or the workplace, at the same time as Ella connects with the global class. Through the technologies of paper and screen, and the processes of reading, writing, viewing and imagining, the University is invoked. As Ella works at a university herself, there is more than one university present in her studies. When studying in her workplace in the evening, one university space meets another. When studying or working at home there are two imagined universities which coexist in the domestic space.

When I ask Ella about the challenges of studying on her course, she identifies 'the internet and power supply (I mean electricity) and occasionally time' (Ella). I go on to ask her if the power supply is very restricted:

[20/03/2013 12:06:11] Ella: 'Yes, very, very restricted. We have about 5-6 hours of light [electricity] where I live. At work, the power supply is also very erratic and the faculty [in Ella's workplace] can only afford to put on the generator for few hours in a day.'

[20/03/2013 12:07:00] Interviewer: Yes, I see, very restricted. Has that made it difficult to access the online course materials and discussions - how do you manage it?

[20/03/2013 12:10:41] Ella: I try to work around the challenge. I have a generator at home which I use. I also have a Laptop which has 5 hour battery capacity, so whenever there is light [electricity], I charge it.'

Ella outlines the restrictions on electricity in the two study spaces she has identified; the work-space and the home-space. She introduces the temporal restrictions of the power supply in terms of supply time and battery time, and charge time for the rechargeable laptop and rechargeable lamp she uses, and the financial relationship between time and the generator and grid. Ella indicates the different financial implications which the different power sources have. After our interview, I look for information on electricity supplies in Nigeria and a complex national political economy emerges. When I return to the transcript some time later, I look for other information sources and I find the complex geopolitical story of 'the generator' in Nigeria (Oladipo 2013). Materials and resources on which Ella must draw have their own time-space restrictions; the moveable laptop and its charge time; the domestic rechargeable lamp; the complex supply time-spaces of the generator and the grid and their relationships with the faculty budget and the priorities of a national government.

7. Discussion: a translocal and transtemporal university

Through these accounts, the University of *CityName* becomes co-present in a UK car park in the early morning; an Egyptian city before curfew, and a Nigerian home late at night. Each additional situation reconfigures the time-space of the campus. There are inequalities in access to resources and in the stability of infrastructures: in these interviews space, time, and electricity vary in their availability. My intention here has been to draw out some of the complex situations in which students may be

located, and which may be brought together in close proximity, in the context of an online course. What becomes clear through the analysis of student interviews is that this is more than a simple matter of the complications of part-time study, although this temporal factor is significant. These scenarios also highlight geo-political spatial and temporal challenges in access to online education, of the kind which may be more predictable in the medium term (infrastructure), and those which reflect a more sudden change in political events (a state of emergency).

As outlined in the early sections of this paper, the concepts of the translocal and the transtemporal help to surface ways of thinking about where and when digital education is located. This becomes more complex than the ubiquitous 'anytime, anywhere' notion of online learning and teaching, which fails to recognise the significance of context, of time taken in the practice of studying, and of the potential inequalities in time and space among 'distance' students. Encouraging thinking about the complexity of the practices and processes of digital education, including significant differences in structure and infrastructure, alongside the bringing together and juxtaposition of particular places and times in the context of a course is important to understanding the changing student experience and, by association, the ways in which universities are present in changing times and places. In practice, there are implications and opportunities for curriculum design; in exploring, for example, what a course group can gain from an understanding of its diversely situated participants, beyond national representations of flags on a map, and how course material can be relevant and related to a number of places and times.

The translocal and the transtemporal also highlight ways of thinking about the experiences of individuals, from a range of places and times which might be associated with 'home', 'work', and 'study' (for both students and staff), to those places and times which might be associated with the 'host' institution, or the 'home' nation. Translocal and transtemporal connections make such distinctions less distinct in digital education. This becomes important to the way that universities communicate with students. During the period of this research, for example, *CityName* encouraged all students to 'study abroad', overlooking the inverse relationship between 'abroad' and the campus for many 'distance' students. An expansion of the student population also requires an expansion of representation, both at the level of promotional materials for institutions, including images of students in multiple locations - beyond the library, the laboratory, and the quad - and at the level of student representation in institutional committees and in student unions, where timezones and alternative modes of 'attendance' may need to be taken into account. Without such representation, increasing numbers of students remain invisible to, and unheard by, those focused on the day to day life of the physical campus.

My aim here, in thinking about the digital university as translocal and transtemporal, is not to suggest that universities should deny the clear historical and present significance of the purpose-built campus, but that for students and staff, wherever they are based, there will be other locales, times and temporalities, which are significant, and which need to be surfaced and understood. I want to suggest that if these locales and times are taken into account, and layered in the context of 'online' courses, the university becomes a much more complex organization than the time-space of the campus, or of higher education discussed at the 'national' level of policy may suggest. Both Massey's 'power-geometry' (1993) and Sharma's 'power-

chronography' (2013) are at work. If the local is, as Rye and Støkken (2012) emphasise, an important element in a student's education space, then educators working in translocal and transtemporal online environments need to think carefully about understanding, and acknowledging pedagogically, the complexity of the spaces and times in which their online courses take place. Not doing so, is not only to neglect new and emerging implications for the student experience, but also undervalues the positive possibilities for course design which takes into account the local experiences, both personal and professional, which may contribute to what Ella describes as the 'global class' in her living room.

For those institutions developing strategic projects in online 'distance' education, whether in the form of full degree programmes or MOOCs, an in-depth exploration of organisational shifts in location and time becomes important to understanding and supporting new experiences for students and staff engaged with such developments, as well as highlighting wider changes in organising practices. With organisational changes come new opportunities, responsibilities, and potential inequalities in university education, as student and staff groups become increasingly geographically and, therefore, geopolitically and temporally diverse. The effects of such changes in institutions with long-standing campus traditions may often be invisible to those staff and students focused on campus-based education and support services. Here I propose that one starting point for understanding shifting institutional boundaries is to surface the new times and spaces in which the institution becomes present. In addition to understanding institutional change, this approach can also help in understanding and supporting the practices of students and staff who may appear to be spatially and temporally 'out of step' and 'out of synch' with the dominant spaces and times of campus life.

Considering the research interview examples discussed in this paper in terms of the translocal and transtemporal framework I have proposed, it is evident that careful consideration of where and when digital education is located goes beyond superficial 'anytime, anywhere' connections, to surface a more complex, multiply located and temporal negotiation. While this paper has focused on a detailed analysis of a small number of student cases, which form part of a larger study of institutional change, in order to explore the value of a translocal and transtemporal framework, it is anticipated that further institutional mapping activities - such as those described in section 3 of this paper - could provide a valuable contribution to the analysis of the contemporary organisation of the digital university. Incorporating quantitative as well as qualitative approaches to mapping and exploring the diversity of times and places in which the university is engaged, might contribute to a deeper understanding of the diverse location(s) of the translocal and transtemporal institution, as well as of the changing experiences and contexts of students and staff. Case studies of innovative course design and student support initiatives for distributed communities with varying access to resources may be particularly welcome across the disciplines.

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